

Amendments to the claims

The following set of claims will replace all prior set of claims currently on file.

CLAIMS

1. (currently amended) A flexographic ink comprising a hydrophobic biodegradable polymer, a binder, a solvent and a dye or a pigment in an amount effective to provide a visible mark on a substrate, wherein said binder is a biodegradable amphiphilic compound, and the hydrophobic biodegradable polymer is at a concentration between about 20 to 80% (w/v).
2. (original) The flexographic ink of claim 1, wherein said biodegradable polymer comprises a synthetic or natural polymer.
3. (original) The flexographic ink of claim 1, wherein said biodegradable polymer is selected from the group consisting of polyhydroxyalkanoate (PHA), polylactic acid (PLA), poly (lactic-co-glycolic) acid (PLGA), polyglycolic acid (PGA), polycaprolactone (PCL), polyvinyl alcohol (PVA), polyvinyl pyrrolidone (PVP), polymer derived from adipic acid or aminocaproic acid, and poly(butylene succinate), or a derivative or a mixture thereof.
4. (cancelled)
5. (original) The flexographic ink of claim 1, wherein said dye or pigment is biodegradable.
6. (original) The flexographic ink of claim 1, wherein said solvent is water or an organic solvent.
7. (currently amended) The flexographic ink of claim 1, wherein ~~said polymer is at a concentration between about 20 to 80% (w/v),~~ said binder is at concentration between about 0.5 to 20% (w/v), and said solvent is at concentration between about 1 to 25%.
8. (previously amended) The flexographic ink of claim 1, wherein said dye or pigment is at concentration between about 1 to 40% (w/v).
9. (previously amended) The flexographic ink of claim 6, wherein said organic solvent is a hydrophilic organic solvent or an alcohol.

10. (previously amended) The flexographic ink of claim 1, wherein said dye is a water-soluble dye.
11. (previously amended) The flexographic ink of claim 1, wherein said dye is a basic or acid dye.
12. (original) The flexographic ink according to claim 1, which also comprises at least one softening agent, thickening agent, surfactant, dispersing agent or mixtures thereof.
13. (original) A composition comprising a flexographic ink as claimed in claim 1.
14. (cancelled)
15. (currently amended) In a method for the preparation of a flexographic ink, which comprises mixing a hydrophobic polymer, a binder, a solvent, and a dye or pigment in an amount effective to provide a visible mark on a substrate, and heating the mixture obtained, wherein said binder is a biodegradable amphiphilic compound and the hydrophobic polymer is at a concentration between about 20 to 80% (w/v), the improvement wherein said polymer is biodegradable.
16. (previously presented) The flexographic ink of claim 7, wherein said binder is at concentration between about 0.5 to 15% (w/v).
17. (previously presented) The flexographic ink of claim 16, wherein said binder is at concentration between about 1 to 10% (w/v).